



1111 W. 35th Street  
Chicago, IL 60609 USA  
Customer Support: (773) 869-1234  
www.tripplite.com

### Owner's Manual

**IBAR 12**  
**IBAR 12 ULTRA**  
**IBAR 12/20 ULTRA**  
**IBRM 12/15A-L20P**  
**IBRM 8/20A-L20P**

**ISOBAR® RACKMOUNT SURGE  
SUPPRESSORS & LINE-NOISE FILTERS**

*Designed to occupy one standard 19 in. rack space*

Congratulations! You now own the best quality surge suppressor available. The UL-listed IBAR series features proven ISOBAR® surge-suppression technology, providing maximum protection against harmful AC transients, including voltage spikes, surges and RFI/EMI line noise. These types of interference are common in all commercial AC power systems.

## INSTALLATION

**(ALL MODELS):** Four screws\* will secure the IBAR into rack position. After screwing IBAR into rack, simply plug the line cord into a grounded 3-conductor, 120-Volt AC outlet. DO NOT use 2-wire extension cords or adapters. Lack of a proper ground connection will eliminate common-mode protection and cause a small leakage potential on the case. However, you can plug 2-wire devices into any of the outlets.

\* Rack screws are user-supplied on IBAR 12 & IBRM 12/15A-L20P. IBAR 12 ULTRA, IBAR 12/20 ULTRA & IBRM 8/20A-L20P include 4 rack screws and an allen wrench.

### NOTE!

**(IBAR 12, IBAR 12 ULTRA & IBRM 12/15A-L20P)** DO NOT exceed the MAXIMUM LOAD of 15 amps that can be drawn from each AC outlet. DO NOT exceed the MAXIMUM LOAD of 15 amps that can be drawn from all twelve outlets combined.

**(IBAR 12/20 ULTRA & IBRM 8/20A-L20P)** DO NOT exceed the MAXIMUM LOAD of 15 amps that can be drawn from each AC outlet located on the front of the unit. DO NOT exceed the MAXIMUM LOAD of 20 amps that can be drawn from each AC outlet located on the rear of the unit. DO NOT exceed the MAXIMUM LOAD of 20 amps that can be drawn from all of the eight outlets combined.

## FEATURES

### CIRCUIT BREAKER (ALL MODELS)

If the current draw of the equipment connected to the IBAR exceeds 15 amps (or 20 amps for IBAR 12/20 and IBRM 8/20A-L20P) for longer than a few seconds, the circuit breaker will open (trip) to prevent any possible damage. When the circuit breaker trips, its plunger will be extended. Allow the breaker to cool for one minute before depressing its plunger to reset.

### ILLUMINATED "ON/OFF" SWITCH (IBAR 12, IBAR 12 ULTRA & IBRM 12/15A-L20P)\*\*

With the IBAR plugged into a 120V AC, 60 Hz AC outlet, this switch will illuminate RED whenever moved to the "ON" position. This indicates 120V AC power is present at the IBAR's AC receptacles.

\*\* IBAR 12/20 ULTRA features an unilluminated "ON/OFF" Switch which displays a RED marking along its edge when it is in the "ON" position.

### ISOLATED FILTER BANKS & CASCADE CIRCUITRY

#### (IBAR 12, IBAR 12 ULTRA & IBRM 12/15A-L20P)

Isolated Filter Banks prevent equipment plugged into each filter bank from interacting with equipment plugged into the other filter bank. Cascade Circuitry provides different levels of protection between the Isolated Filter Banks.

There are two Isolated Filter Banks on the IBAR 12, IBAR 12 ULTRA & IBRM 12/15A-L20P.\*\*\* Isolated Filter Bank #2 provides the highest level of protection for your most sensitive equipment. Isolated Filter Bank #1 provides standard protection for your less-sensitive or noise-producing equipment.

\*\*\* See rear panel diagrams on page 3 to locate the filter banks on your model.



### DIAGNOSTIC INDICATOR LIGHTS (IBAR 12 ULTRA, IBAR 12/20 ULTRA & IBRM 8/20A-L20P)

There are three LEDs on the front panel that indicate various operating parameters when the unit is plugged into a live 120VAC/60 Hz outlet as follows, from left to right across the front of the unit:

#### Protection Present (Green LED)

Indicates the surge-suppression components are intact and providing full protection against spikes and surges. This LED should be lit anytime the IBAR "ON/OFF" switch is turned ON and power is present, as indicated by the lighted power switch. If the Protection Present LED does not light, then some of the surge-suppression components are not functioning and the unit should be returned for repair as soon as possible. You may still use the unit; however, connected equipment will be protected from spikes and surges at a lesser level than normal.

#### Line Fault (Red LED)

Indicates a wiring fault has been detected. If this LED illuminates at any time the unit is plugged in, the fault should be repaired by a qualified electrician as soon as possible. This LED indicates that phases are reversed, ground is missing or some other sort of wiring error exists in the circuit the IBAR is plugged into. The Line Fault detector circuitry will identify most common wiring faults, but will not necessarily detect every possible type of fault.

#### NOTE!

If the Line Fault indicator light illuminates, carefully check the AC receptacle the IBAR is plugged into. The receptacle must be tight and securely grounded. A loose AC receptacle may cause the Line Fault LED to illuminate. It must be understood that this Red LED indicates the presence of a wiring fault, but does not indicate the exact nature of the fault. Therefore, a qualified electrician should make necessary repairs.

#### NOTE!

If the Line Fault indicator light illuminates and power is not present at the outlets, the IBAR's surge-suppression components have been compromised as a result of surge damage. For service, call Tripp Lite Customer Support at (773) 869-1234. Fully explain the perceived problem to the customer support person. They will either remedy the problem over the phone or give you instructions about return, repair or exchange.

#### Line "OK" (Green LED)

Indicates 120V AC power is present with no wiring faults detected. When this LED is illuminated, AC power is safe for connected equipment.

### SPECIFICATIONS

	IBAR 12	IBAR 12 ULTRA	IBAR 12/20 ULTRA
AC Energy Absorption (joules):	750	1200	1200
Surge Suppression (amp spikes)*:	60,000	96,000	96,000
UL 1449 Let-Through Rating:	400V	330V	330V
HF Noise Suppression (@ 1 MHz)			
Filter Bank #1:	40 dB	40 dB	80 dB
Filter Bank #2:	80 dB	80 dB	-
AC Receptacles:	2 NEMA 5-15R (front) 10 NEMA 5-15R (back)	2 NEMA 5-15R (front) 10 NEMA 5-15R (back)	2 NEMA 5-15R (front) 6 NEMA 5-20R (back)
AC Line Cord:	12', w/NEMA 5-15P plug	12', w/NEMA 5-15P plug	12', w/NEMA 5-15P plug
Circuit Breaker (Resettable):	15 amp	15 amp	20 amp
Dimensions (HxWxD, inches):	1-3/4 x 17-1/2 x 4	1-3/4 x 17-1/2 x 4	1-3/4 x 17-1/2 x 4
Weight (lbs.):	4-1/2	3	5

### SPECIFICATIONS

	IBRM 12/15A-L20P	IBRM 8/20A-L20P
AC Energy Absorption (joules):	1200	1200
Surge Suppression (amp spikes)*:	96,000	96,000
UL 1449 Let-Through Rating:	330V	330V
HF Noise Suppression (@ 1 MHz)		
Filter Bank #1:	40 dB	80 dB
Filter Bank #2:	80 dB	-
AC Receptacles:	2 NEMA 5-15R (front) 10 NEMA 5-15R (back)	2 NEMA 5-15R (front) 6 NEMA 5-20R (back)
AC Line Cord:	12', w/NEMA 5-L20P locking plug	12', w/NEMA 5-L20P locking plug
Circuit Breaker (Resettable):	15 amp	20 amp
Dimensions (HxWxD, inches):	1-3/4 x 17-1/2 x 4	1-3/4 x 17-1/2 x 4
Weight (lbs.):	4-1/2	5

All Models: Nominal Input Voltage: 120VAC; Input Frequency: 50/60 Hz;  
Transient Response Time: Instantaneous (0 ns).\*\*

\*Spike protection is provided in all three modes; hot to neutral, hot to ground and neutral to ground.

\*\*Transient amplitude reduction occurs faster than the clamp response of the varistors because of the high rejection rate of the ISOBAR filter networks.



UL 1449 (1999 rev.): IBAR 12, IBAR 12/20 ULTRA, IBRM 12/15A-L20P and  
IBRM 8/20A-L20P: 330V let-through (UL's best rating for surge suppression);  
IBAR 12: 400V let-through  
UL 1283: for line-noise filtering  
CUR: meets Canadian National Standards as recognized by UL

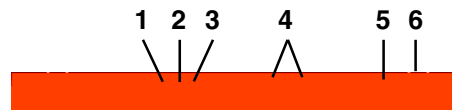
## FRONT PANELS



**IBAR 12**  
**IBRM 12/15A-L20P**

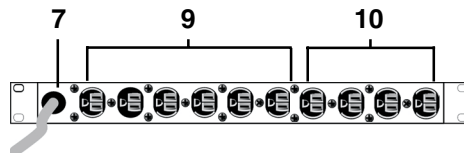
### FRONT PANEL FEATURES

- 1) Protection Present LED
- 2) Line Fault LED
- 3) Line "OK" LED
- 4) 15-amp Outlets  
(Standard Protection)
- 5) Circuit Breaker
- 6) On/Off Switch



**IBAR 12 ULTRA,**  
**IBAR 12/20 ULTRA**  
**IBRM 8/20A-L20P**

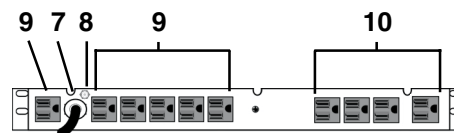
## REAR PANELS



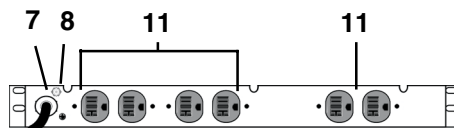
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### REAR PANEL FEATURES

- 7) AC Power Cord
- 8) Grounding Post
- 9) Filter Bank #1  
15-amp Outlets  
(Standard Protection)
- 10) Filter Bank #2  
15-amp Outlets  
(Increased Protection)
- 11) 20-amp Outlets  
(Standard Protection)



**IBAR 12 ULTRA**



**IBAR 12/20 ULTRA**  
**IBRM 8/20A-L20P**

## LIFETIME LIMITED WARRANTY

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship for its lifetime. If the product should prove defective in material or workmanship within that period, Seller will repair or replace the product, in its sole discretion. Service under this Warranty can only be obtained by your delivering or shipping the product (with all shipping or delivery charges prepaid) to: Tripp Lite, 1111 W. 35th Street, Chicago, IL 60609. Seller will pay return shipping charges. Call Tripp Lite at (773) 869-1234 before sending any equipment back for repair.

The warranties of all TRIPP LITE surge suppressors are null and void if they have been connected to the output of any UPS system. The warranties of all TRIPP LITE UPS Systems are null and void if a surge suppressor has been connected to its output receptacles.

THIS WARRANTY DOES NOT APPLY TO NORMAL WEAR OR TO DAMAGE RESULTING FROM ACCIDENT, MISUSE, ABUSE OR NEGLIGENCE. SELLER MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSLY SET FORTH HEREIN. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ALL IMPLIED WARRANTIES, INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE; AND THIS WARRANTY EXPRESSLY EXCLUDES ALL INCIDENTAL AND CONSEQUENTIAL DAMAGES. (Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from jurisdiction to jurisdiction).

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**WARNING:** The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer makes no representation or warranty as to the suitability or fitness of these devices for any specific application.

Policy of Tripp Lite is one of continuous improvement. Specifications are subject to change without notice.

## ULTIMATE LIFETIME INSURANCE POLICY (Valid in U.S. and Canada ONLY)

TRIPP LITE warrants, for the lifetime of the product, (at TRIPP LITE'S option) to repair or replace (on a pro rata basis) directly connected equipment, that is damaged due to power transients while properly connected to TRIPP LITE products offering the ULTIMATE® Insurance Policy. Reimbursement or restoration for data loss is not included. Power transients include spikes and surges on the AC power, data, or telephone lines that the TRIPP LITE products have been designed to protect against (as recognized by industry standards).

**AC Power Line Transients:** To claim damages the TRIPP LITE product must be plugged into a properly wired and grounded outlet. No extension cords, or other electrical connections may be used. The installation must comply with all applicable electrical and safety codes set forth by the National Electrical Code (NEC). Except as provided above, this warranty does not cover any damage to properly connected electronic equipment resulting from a cause other than an "AC power transient". If user meets all of the above requirements, TRIPP LITE will repair or replace (at TRIPP LITE'S option) equipment up to the specified value (See ULTIMATE® Insurance Policy Limits). No coverage is allowed for damage entering from telephone or data lines, unless they are separately protected as described below.

Reimbursement dollar limits will be equal to that of the Tripp Lite power protection protector. Coverage is excluded where a suitable environment for the protection device is not provided, including, but not limited to, lack of a proper safety ground. Telephone service equipment must also include a properly installed and operating "primary protection" device at the telephone service entrance (such devices are normally added during telephone-line installation).

All above warranties are null and void if the TRIPP LITE product has been improperly installed, tampered with or altered in any way, or if the connected equipment was not used under normal operating conditions or in accordance with any labels or instructions. All claims under this warranty must be submitted in writing to Tripp Lite within 30 days of the occurrence or the claim will not be considered. This warranty does not include damage resulting from accident or misuse, and applies to the domestic (USA & Canada) use of these products only.

Tripp Lite reserves the right to determine whether the damage to the connected equipment is due to malfunction of the Tripp Lite product by requesting the equipment in question be sent to Tripp Lite for examination. This policy is above and beyond, only to the extent needed, of that provided by any coverage of connected equipment provided by other sources, including, but not limited to, any manufacturer's warranty and/or any extended warranties.

EXCEPT AS PROVIDED ABOVE, TRIPP LITE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL TRIPP LITE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, TRIPP LITE is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise.

To receive service under this warranty, you must be the original purchaser/user of the product in question. You must obtain a Returned Material Authorization (RMA) number from TRIPP LITE. Products must be returned to TRIPP LITE with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase.